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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,077	12/15/2003	Leon A. Pintsov	F-708	3243

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Pitney Bowes Inc.  
Intellectual Property and Technology Law Dept.  
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Shelton, CT 06484

EXAMINER
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MURDOUGH, JOSHUA A

ART UNIT	PAPER NUMBER
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3621

MAIL DATE	DELIVERY MODE
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04/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/736,077

**Applicant(s)**

PINTSOV ET AL.

**Examiner**

JOSHUA MURDOUGH

**Art Unit**

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 12/15/2003, 4/11/2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgements***

1. Claims 1-26 are currently pending.
2. Claims 21-26 are withdrawn as noted below.
3. Claims 1-20 have been examined.

### ***Election/Restrictions***

4. Applicant's election of Group I, claims 1-20 in the reply filed on 3 January 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
5. Claims 21-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Drawings***

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the manner in which the defaced image differs from the pristine image and the effects of the defacing on the descriptors must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

8. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "characterization information," "descriptors," and "robustness".
9. The phrase "simulating simulate blots" (at least in paragraph 0009) is believed to be a typographical error. The Examiner believes this should have simply read "simulating blots" as there is no support for simulating a simulation, as the language implies.

***Claim Objections***

10. Claims 2-5 and 13-16 objected to because of the following informalities: The phrase “print/scan” is used and the Examiner is unclear if it means “print or scan” or if it is referring to a print and scan combination process. The Examiner has interpreted it to be the former.

Appropriate correction is required.

11. Claims 6 and 17 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These claims require that the estimates of robustness for each algorithm be predetermined while the claims they depend from (1 and 12) require that the estimates be calculated at the time of use. Therefore, a system or method, where the values are known could infringe on the dependent claims, while not infringing the independent claims.

12. Claim 4 is objected to because of the following informality: The phrase “simulating simulate blots” is believed to be a typographical error. The Examiner believes this should have simply read “simulating blots” as there is no support in the claims or the specification for simulating a simulation, as the language implies.

***Claim Rejections - 35 USC § 112 1<sup>st</sup> Paragraph***

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. As per 2107(B)(1)(i), "A claimed invention must have a specific and substantial utility. This requirement excludes 'throw-away,' 'insubstantial,' or 'nonspecific' utilities, such as the use of a complex invention as landfill, as a way of satisfying the utility requirement of 35 U.S.C. 101." As there would be no specific or substantial utility to one of ordinary skill in the art found from the selection of the combination of descriptors, these claims are deemed to lack utility.
15. Claims 1-7, 10, and 11 are rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

***Claim Rejections - 35 USC § 112 2nd Paragraph***

16. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
17. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
18. In claim 1, step a) said block is printed, but in lines 1-2 of the claim, said block appears to have already been printed. It is not clear if step a) was intended to occur before the reference in lines 1-2, or if step a) is actually a reprinting. Applicant is advised to move essential subject matter out of the preamble and into an appropriate location in the body of the claims to provide clarity and also to ensure proper weight is given to the limitations.

19. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: scanning the block and applying the algorithms to the image.

20. Throughout the claims, the terms "characterization information" and "descriptors" are used. As they are used in the claims, there appears to be a difference between them, but according to the specification, "Such bit streams are hereinafter sometimes 'characterizing information descriptors' or 'descriptors' and such values are hereinafter sometimes 'characterizations'," (Paragraph 0034) which seems to imply these terms can be used interchangeably. If there is no difference between these terms, then one of the terms should be selected to distinctly represent the data. If there is a difference between the terms, Applicants are requested to point out where in the specification the difference is shown.

21. The term "robustness" in at least claims 1 and 12 is a relative term which renders the claim indefinite. The term "robustness" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear how the robustness is calculated, nor is it understood how the estimates of the robustness are applied to select descriptors.

22. Claim 4 contains the phrase "...or other, similar occasional events...." "Other" is open-ended and therefore not definite in scope. "Similar" and "occasional" are both relative terms which further render the claim indefinite.

***Claim Rejections - 35 USC § 101***

23. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

24. Claims 1-7, 10, and 11 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. As discussed above, these claims lack a specific and substantial utility and therefore are rejected under 35 U.S.C. 101 as well as 35 U.S.C. 112.

***Claim Rejections - 35 USC § 102***

25. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

26. Claim 1 as best understood is rejected under 35 U.S.C. 102(b) as being anticipated by Bradford (US 5,805,747).

27. As to claim 1, Bradford shows:

A method for generating characterizing information for a selected block of printed material, where said printed material is to be scanned from an object and compared with said characterizing information at a location distant from where said block is printed, said method comprising the steps of:

a) printing said block on an object (paper) (in order to apply OCR, the characters must be in printed form, Column 1, lines 16-19);



b) determining estimates of robustness (confidence) for each algorithm in a predetermined set of algorithms (Abstract); and

c) selecting, as a function of said estimates, a combination of descriptors generated by a corresponding combination of said algorithms (Figures 7A-1 thru 9B-3) as said characterizing information (Figure 10).

### *Claim Rejections - 35 USC § 103*

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claims 2-6, 10, and 11 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradford in view of Gatto et al. (US 6,344,906) ("Gatto").

30. Bradford shows all of the elements of claim 1 and further shows the comparing of original descriptors, from the pristine image, to those measured by different algorithms (Figure 10) (Figures 7A-1 thru 9B-3 show a plurality of sets of descriptors from different algorithms).

Bradford does not show the use of filters to operate on the scanned images.

However, Gatto shows the use of a plurality of filters during the scanning process (Figure 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the teachings of Bradford to add the filtering of Gatto in order to produce images that can be operated on by the algorithms more easily.

31. Claims 7-9 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradford and Gatto as applied to claims 2-6, 10, and 11 above, and further in view of Montgomery et al. (US 2003/0101148) (“Montgomery”).

32. Bradford and Gatto disclose as discussed above, but do not expressly show that the object is a mail piece and the block of printed material represents an address. Nor do they show the use of an encrypted mail indicium.

However, Montgomery shows the use of OCR (Paragraph 0140) on a mail piece **200** with a label containing an address. The mail piece further contains an encrypted indicium (Figure 19). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the teachings of Bradford to process mail as shown by Montgomery, in order to provide for higher reliability in mail processing.

### ***Claim Interpretations***

33. Due to the large number of vague and indefinite terms, as well as the other problems cited above, the Examiner has relied on his best understanding of the limitations in the treatment of the claims on the merits.

34. Claims 12-20 are apparatus claims and therefore, structural limitations are given significantly more patentable weight than are functional limitations, as per MPEP 2114. “While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function.” (Id) “[A]pparatus claims cover what a device *is*, not what a device *does*.” (Id, emphasis in original)

The Examiner suggests that positive recitation of the structural elements be used in order to provide for more patentable weight to be given to the limitations.

***Double Patenting***

35. Claim 12 of this application conflict with claim 1 of Application No. 10/719,050. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.
36. Claim 12 of this application conflict with claim 1 of Application No. 10/719,051. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.
37. Claim 1 of this application conflict with claim 1 of Application No. 10/736,268. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

***Conclusion***

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA MURDOUGH whose telephone number is (571)270-3270. The examiner can normally be reached on Monday - Thursday, 7:00 a.m. - 5:00 p.m.

39. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on (571) 272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

40. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. M.  
Examiner, Art Unit 3621

/Jalatec Worjloh/  
Primary Examiner, Art Unit 3621